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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,666	09/25/2001	Rudolf Kodes	1454.1079	6964

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER	
THANGAVELU, KANDASAMY	
ART UNIT	**PAPER NUMBER**
2123	

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/889,666	KODES, RUDOLF	
	Examiner	Art Unit	
	Kandasamy Thangavelu	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5-7,9-13,20 and 21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5-7,9-13,20 and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 September 2001* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to the Applicants' Response mailed on July 17, 2006. Claim 21 was added. Claims 1, 5-7, 9-13, 20 and 21 of the application are pending. This office action is made final.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

3. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 5-7, 9-13, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Agrawal et al.** (U.S. Patent 6,278,977) in view of **Steinman** (U.S. Patent 6,324,495).

4.1 **Agrawal et al.** teaches Deriving process models for workflow management systems from audit trails. Specifically, as per claim 1, **Agrawal et al.** teaches a processing method for an engineering activity (Abstract, L1-9; CL2, L16-23), comprising:

connecting a first event of the engineering activity to a set of second events of the engineering activity (CL2, L16-23; Fig. 4, Items A, B and C);

determining at least one third event of the engineering activity from the set of second events (Fig. 4, Item D, B and C; CL2, L18-23); and

carrying out the connection of the at least one third event to the first event in a predecessor/successor relationship (CL8, L6-15; CL10, L40-47).

Agrawal et al. does not expressly teach connecting a first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship. **Steinman** teaches connecting a first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship (Abstract, L1-6; CL1, L39-47; CL1, L48-54). It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the method of **Agrawal et al.** with the method of **Steinman** that included connecting a first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship, because processing of an event can affect the state variables of the engineering system and can cause new events to occur in the future for one or more objects in the system; this interaction of cause and effect relationship requires that the new events generated be scheduled to occur at activity time later than current time (CL1, L48-54).

Per claims 5-7: **Agrawal et al.** teaches the events have a predecessor/successor relationship with respect to one another (CL8, L6-15; CL10, L40-47);

the first event precedes the third event in the predecessor/successor relationship (CL8, L6-15; CL10, L40-47; Fig. 4, Items A and D);

the third event succeeds the first event in the predecessor/successor relationship (CL8, L6-15; CL10, L40-47; Fig. 4, Items A and D).

Per claims 9-11: **Agrawal et al.** teaches that the events have associated information generated as results of the activities (CL3, L24-29; CL7, L57-59);

representing an engineering activity system or a portion thereof with a graphical user interface ((CL3, L24-29);

the graphical representation is effected by means of actuation using a context-sensitive menu (CL3, L24-29; CL7, L57 to CL8, L5).

Per claim 12: **Agrawal et al.** teaches that the events are used to design an engineering activity (CL11, L45-55).

4.2 As per claim 13, **Agrawal et al.** teaches a processing system, having a processor (Abstract, L1-9; CL2, L16-23), to construct:

a first event of an engineering activity connected to a set of second events of the engineering activity (CL2, L16-23; Fig. 4, Items A, B and C);

at least one third event of the engineering activity determined from the set of second events (Fig. 4, Item D, B and C; CL2, L18-23); and

a connection of the at least one third event to the first event in a predecessor/successor relationship (CL8, L6-15; CL10, L40-47).

Agrawal et al. does not expressly teach a first event of an engineering activity connected to a set of second events of the engineering activity in a cause-and-effect relationship. **Steinman** teaches a first event of an engineering activity connected to a set of second events of the engineering activity in a cause-and-effect relationship (Abstract, L1-6; CL1, L39-47; CL1, L48-54).

Per claim 20: **Agrawal et al.** teaches that the events have associated information, generated as results of the activities (CL11, L45-55).

4.3 As per claim 21, **Agrawal et al.** teaches a (processing) method (for an engineering activity) (Abstract, L1-9; CL2, L16-23), comprising:

modeling an engineering activity having a plurality of interrelated events with relationships defined between the events (CL2, L16-23; Fig. 4, Items A, B and C);

displaying the model of the engineering activity with all relationships being shown; and selecting a first event of the engineering activity using a graphical user interface (CL2, L16-23; Fig. 4; CL3, L24-29; CL9, L21-26);

preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity (CL2, L16-23; Fig. 4, Items A, B and C);

determining at least one third event of the engineering activity from the set of second events (Fig. 4, Item D, B and C; CL2, L18-23);

preparing at least one second connection to connect the at least one third event to the first event in a predecessor/successor relationship (CL8, L6-15; CL10, L40-47); and

displaying the first event together with connections selected from the group consisting of the first connections and the at least one second connection (CL2, L16-23; Fig. 4, Items A, B and C; CL8, L6-15; CL10, L40-47), the first event and the connections being displayed without displaying any relationship unless the relationship is defined by a first or second connection (CL2, L16-23; Fig. 4; CL2 L45-49; CL8, L6-15).

Agrawal et al. does not expressly teach preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship. **Steinman** teaches preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship (Abstract, L1-6; CL1, L39-47; CL1, L48-54).

Response to Arguments

5. Applicant's arguments with respect to 35 USC 103 (a) rejections filed on July 17, 2006 have been considered. Applicant's arguments with respect to 35 USC 103 (a) rejections are not persuasive.

5.1 As per the applicant's argument that "Neither Agrewal et al. nor Steinman disclose or suggest the Invention, as claimed", the Examiner respectfully disagrees. The Examiner has shown that all the features claimed by the applicant are taught by **Agrawal et al.** and **Steinman** and the motivation to combine the two is also presented.

Agrawal et al. teaches a (processing) method (for an engineering activity) (Abstract, L1-9; CL2, L16-23), comprising:

modeling an engineering activity having a plurality of interrelated events with relationships defined between the events (CL2, L16-23; Fig. 4, Items A, B and C);

displaying the model of the engineering activity with all relationships being shown; and selecting a first event of the engineering activity using a graphical user interface (CL2, L16-23; Fig. 4; CL3, L24-29; CL9, L21-26);

preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity (CL2, L16-23; Fig. 4, Items A, B and C);

determining at least one third event of the engineering activity from the set of second events (Fig. 4, Item D, B and C; CL2, L18-23);

preparing at least one second connection to connect the at least one third event to the first event in a predecessor/successor relationship (CL8, L6-15; CL10, L40-47); and

displaying the first event together with connections selected from the group consisting of the first connections and the at least one second connection (CL2, L16-23; Fig. 4, Items A, B and C; CL8, L6-15; CL10, L40-47), the first event and the connections being displayed without displaying any relationship unless the relationship is defined by a first or second connection (CL2, L16-23; Fig. 4; CL2 L45-49; CL8, L6-15).

Agrawal et al. does not expressly teach preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship. **Steinman** teaches preparing first connections to connect the first event of the engineering activity to a set of second events of the engineering activity in a cause-and-effect relationship (Abstract, L1-6; CL1, L39-47; CL1, L48-54).

Conclusion

ACTION IS FINAL

6. Applicant's arguments with respect to claim rejections under 35 USC 103 (a) are not persuasive. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kandasamy Thangavelu whose telephone number is 571-272-3717. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez, can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K. Thangavelu
Art Unit 2123
August 3, 2006